



U.S. Department of Energy
**Energy Efficiency
and Renewable Energy**

Bringing you a prosperous future where energy
is clean, abundant, reliable, and affordable

Federal Energy Management Program

*Federal Renewable Energy
Guidance to EPACT 2005*

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The guidance outlines the following:

- Authority
- Requirement
- Definition of the renewable energy technologies & products
- Requirements for qualifying renewable energy projects or purchases
- How agencies renewable energy purchase toward energy reduction requirements will gradually phase out



Authority

The authority for this guidance is based on Section 203, FEDERAL PURCHASE REQUIREMENT of the Energy Policy Act of 2005 (42 U.S.C. 15852) and Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (72 FR 3919; January 24, 2007), and the instructions and guidance distributed by the Chairman of the Council for Environmental Quality for the implementation of the Executive Order.



Comparison of EO13423 and EPACT 2005

	2007-2009	2009-2012	2013 – onward	Can include new non-electrical	New or old source
EO13423 <i>new</i> RE sources <i>minimum</i> requirements	1.5%	2.5%	3.7%	Yes	No, exclusively new
EPACT 2005 total minimum RE requirements	3%	5%	7.5%	No	Yes

Renewable energy must be consumed to be counted
Requirements are above any system or RPS delivered energy
Agency must have rights to claim use



What counts as new?

- Electric energy from all of the renewable energy sources that satisfy the definitions and qualifications explained in sections 2.2.3 through 2.2.13 may be counted towards the EO13423 Requirement
- Agencies may also count qualified non-electric energy from new renewable energy sources of the types detailed in sections 2.2.3 through 2.2.13
- Definition is expanded thermal and mechanical energy as well as day lighting
- **The renewable energy source must be placed into service after January 1, 1999**



- **Biomass**
- **Geothermal**
- **Solar**
- **Wind**
- **Landfill Gas**
- **Municipal Solid Waste –**
- **Ocean - New**
- **Incremental Hydropower - New**



RECs - represent the technology and environmental (non-energy) attributes of energy generated from renewable sources.

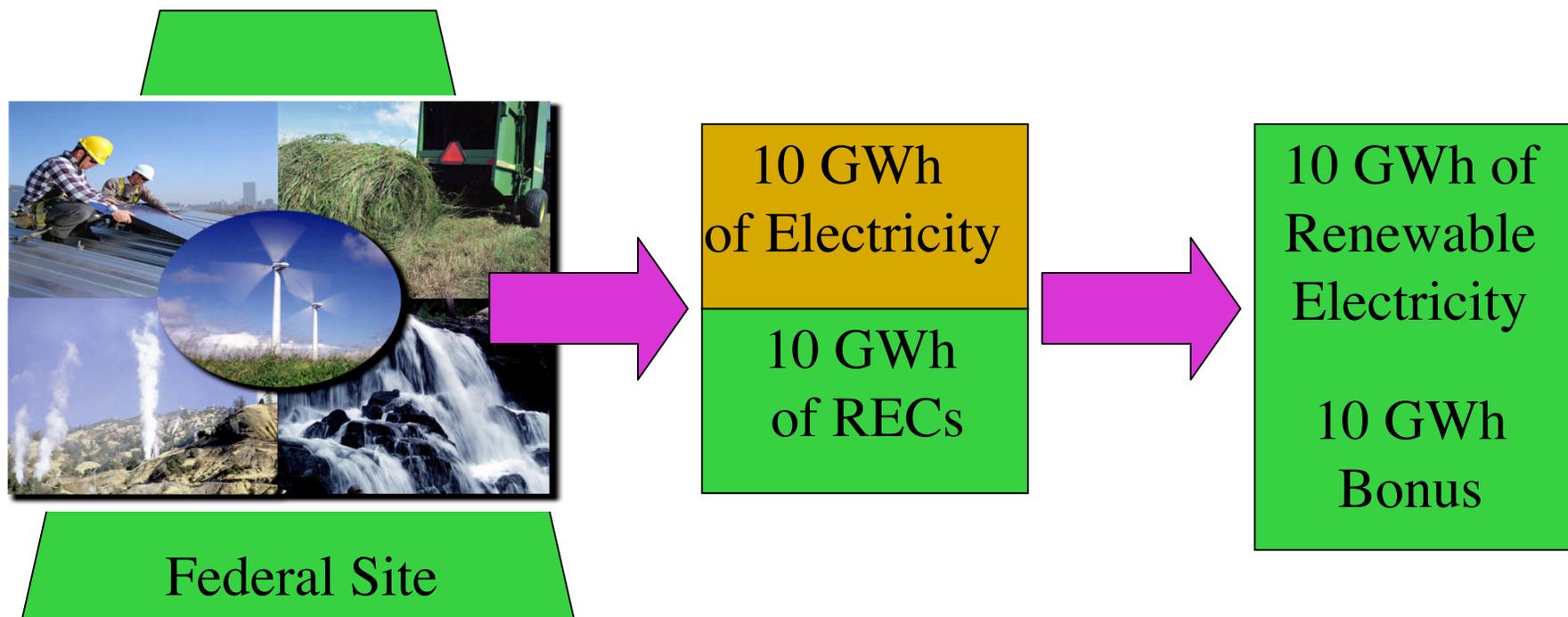
- RECs can be sold separately from the of electricity with which it is associated.
- RECS from qualified sources may be used to meet the RE goals.
- Both the renewable attributes and the non-energy attributes must be retained by the agency, or retired
- Vintage 6 months immediately preceding or 3 months immediately following reporting
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- EPACT 2005 allows for double credit for renewable energy produced on Federal or Indian land and used by a Federal agency
- The bonus will only apply to “New” or refurbished projects
 - Agencies may split bonus if one buys renewable energy and the other consumes it but all credit goes to agency which purchases the energy and RECs unless otherwise stated
 - If RECs are not retained the agency receives no credit for the original generation or the bonus
 - Swapping of RECs to re-green a project is permitted
 - Swapping may be done at agency level



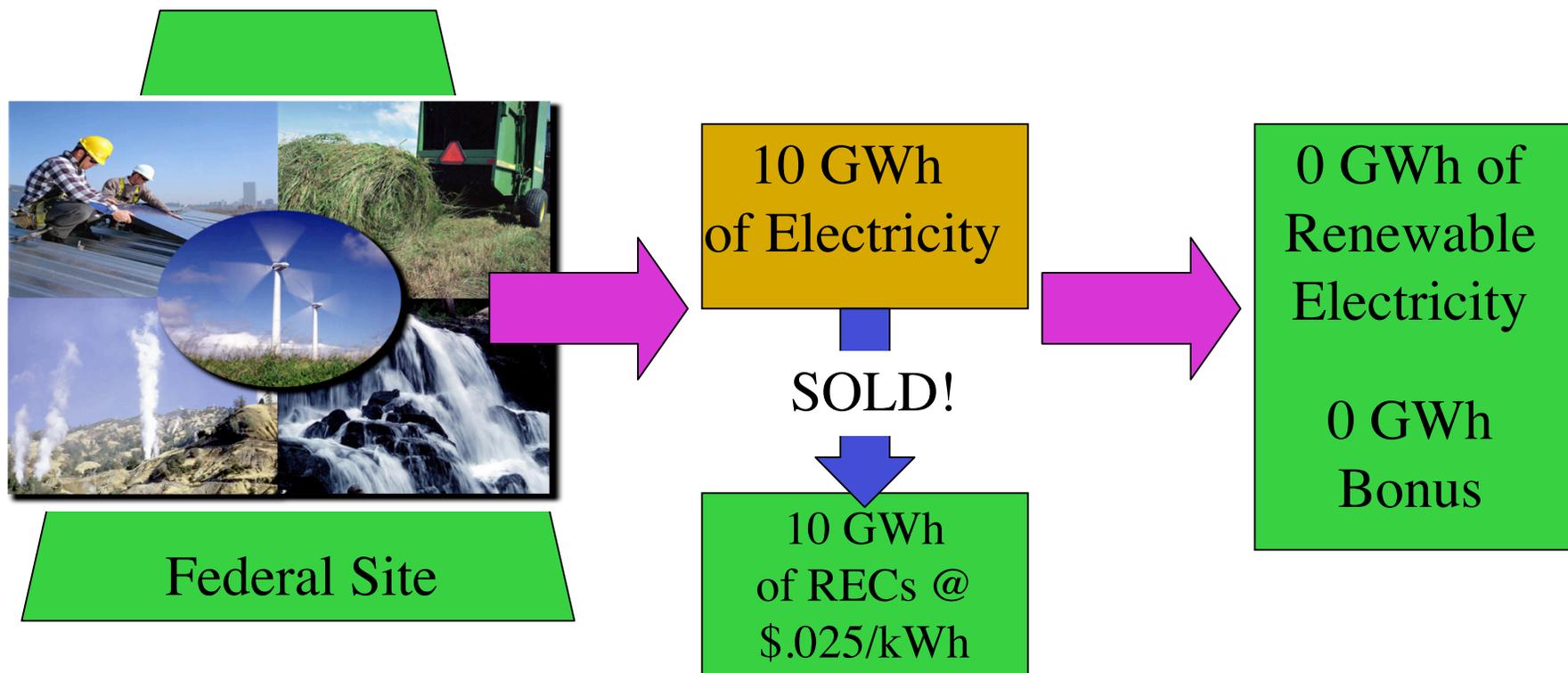
Case 1: Site Retains RECs from On-Site Project



At \$.05/kWh site spends \$50M, for 10 GWh of electricity and 10 GWh bonus, total of 20 GWh of credit toward renewable energy goal



Case 2: RECs from On-Site Project Sold Outside Government

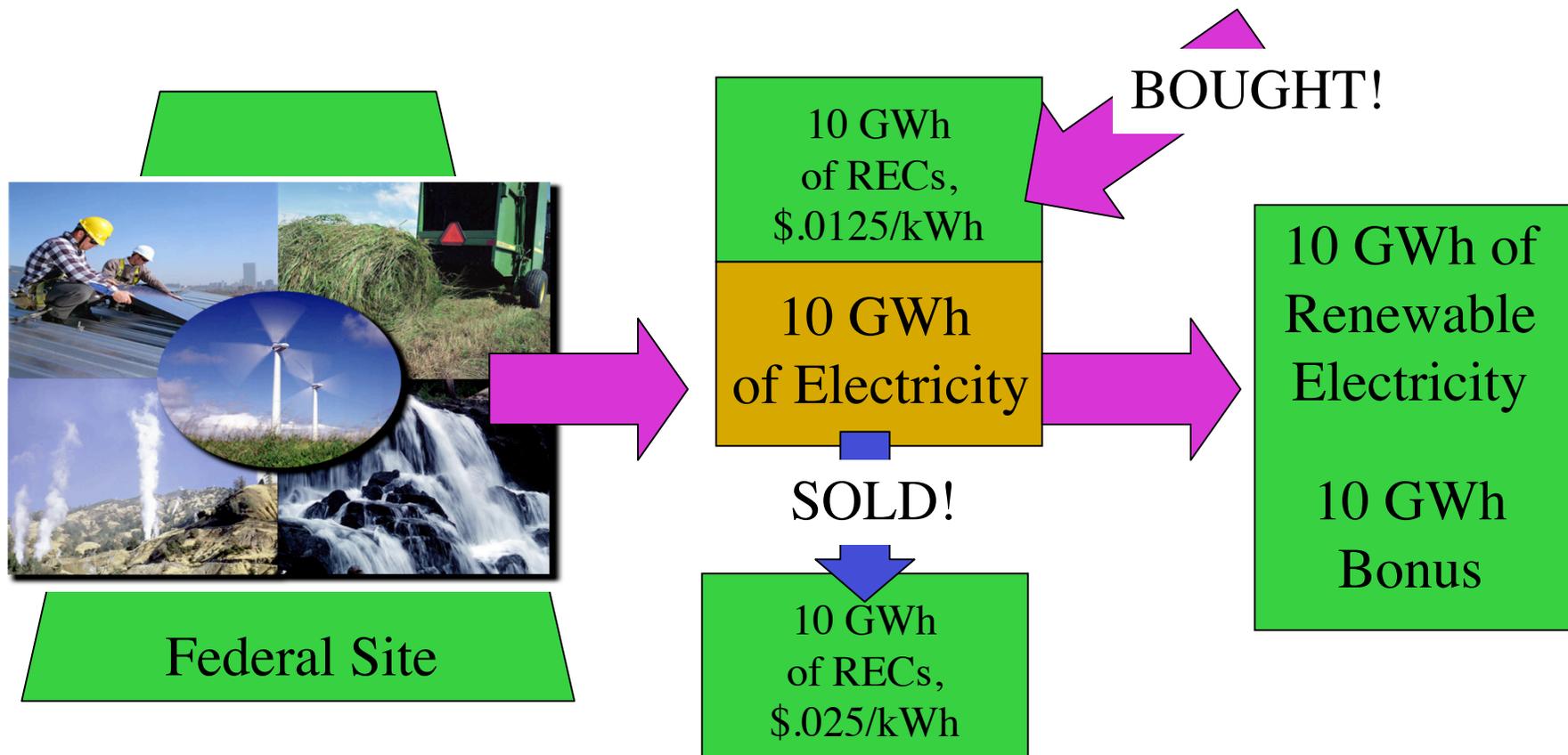


At \$.05/kWh site spends \$50M. RECs sold for \$.025/kWh to reduce costs by \$25M. 0 GWh of credit toward renewable energy goal because without RECs the electricity is just electricity.



RECs and Bonus

Case 3: RECs from On-Site Project “Swapped” to Reduce Costs



At \$.05/kWh site spends \$50M. RECs sold for \$.025/kWh to reduce costs by \$25M. RECs from new (installed after January 1, 1999) renewable energy sources purchased at \$.0125/kWh for \$12.5 M. Net cost to site = \$37.5M 20 GWh of credit toward goal



Agencies must avoid Double counting of RECs

Double counting occurs when:

- More than one party at the same time claims the renewable energy attributes from renewable energy generation
- Renewable energy counted toward the agency's goal is also used to meet a renewable portfolio standard or other federal, state, or local regulatory requirement,
- Non-energy attributes such as emissions credits/allowances or other environmental attributes are further disaggregated from the renewable attributes by the renewable energy/REC supplier and sold separately
- The Federal Government must be a market leader and should not engaged in practices that damage the credibility of the market place

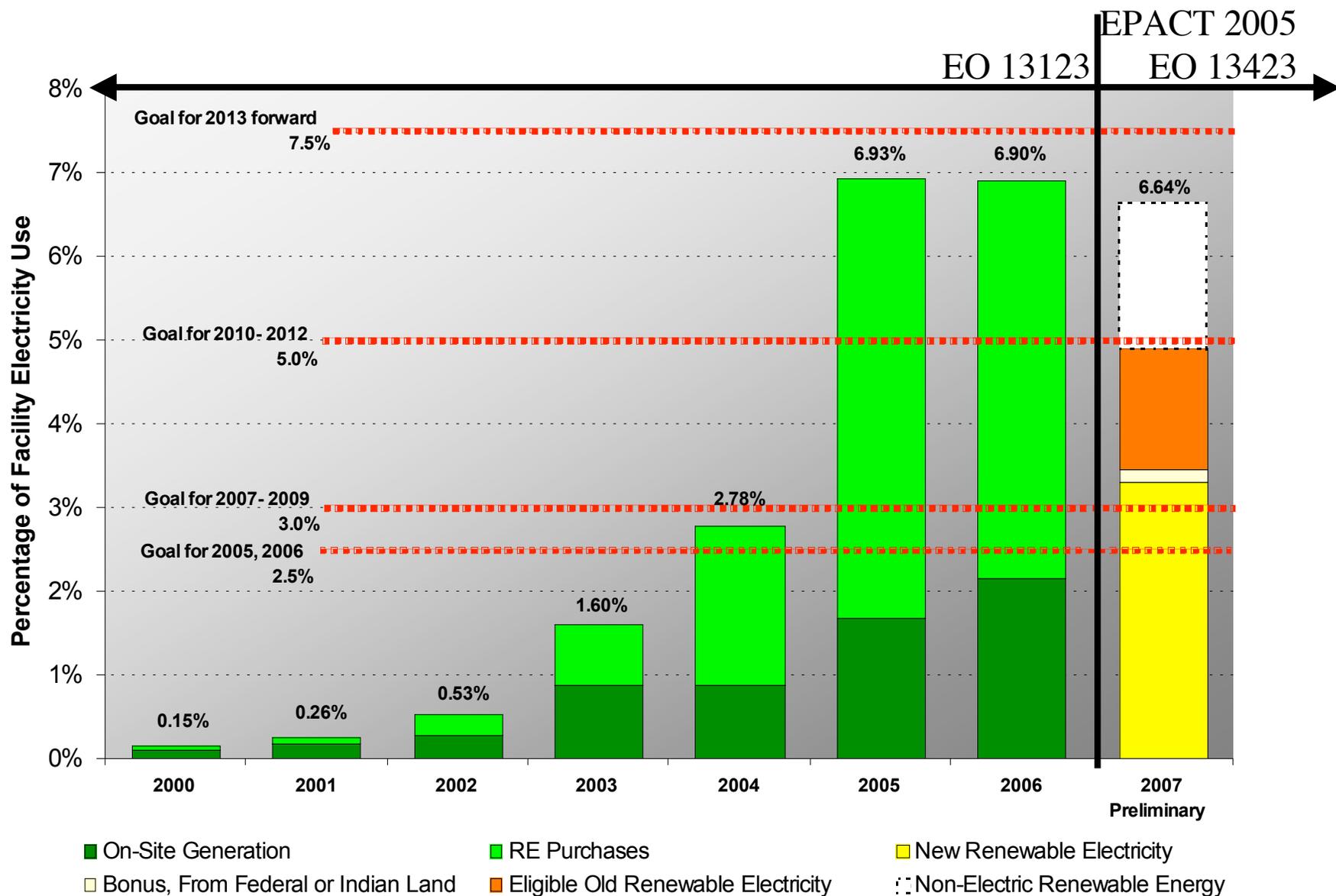


The guidance phases out the use of REC and renewable energy purchases to meet energy Efficiency goals

Fiscal Year	EE goal	Max Short Term	Max Long Term
• 2007	4%	No limit	NA
• 2008	9%	5.4%	7.2%
• 2009	12%	4.8%	7.2%
• 2010	15%	3.0%	6.0%
• 2011	18%	1.8%	3.6%
• 2012	21%	0.0%	0.0%



Legal and Policy Changes and Federal Renewable Energy Use





- EISA Section 523: 30% of hot water requirements on new buildings or major renovations from solar, if cost-effective
- EISA Section 433: Federal Building Energy Efficiency Performance Standards to **reduce fossil fuel generated energy consumption** in new buildings and major renovations (2003 baseline) by:
 - 55% in 2010
 - 65% in 2015
 - 80% in 2020
 - 90% in 2025
 - 100% in 2030



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- FEMP Web Site – Renewables, Guidance
 - http://www1.eere.energy.gov/femp/renewable_energy/
 - http://www1.eere.energy.gov/femp/pdfs/epact05_fedrenewenergyguid.pdf
- FEMP Focus newsletter
 - <http://www1.eere.energy.gov/femp/newsevents/fempfocus.cfm>
- State Efficiency/Renewable Funds/Incentives
 - <http://www.dsireusa.org/>